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1  #include "StateMachineExampleGame.h"
2
3  #include "MainMenuState.h"
4  #include "GameplayState.h"
5  #include "SettingState.h"
6  #include "HighScoreState.h"
7  #include "WinState.h"
8  #include "LoseState.h"
9
10 #include "Game.h"
11
12 StateMachineExampleGame::StateMachineExampleGame(Game* pOwner)
13     : m_pOwner(pOwner)
14     , m_pCurrentState(nullptr)
15     , m_pNewState(nullptr)
16 {};
17
18 bool StateMachineExampleGame::Init()
19 {
20     LoadScene(SceneName::MainMenu);
21     return true;
22 }
23
24 bool StateMachineExampleGame::UpdateCurrentState(bool processInput)
25 {
26     bool done = false;
27     if (m_pNewState != nullptr)
28     {
29         ChangeState(m_pNewState);
30         m_pNewState = nullptr;
31     }
32
33     if (m_pCurrentState != nullptr)
34     {
35         done = m_pCurrentState->Update(processInput);
36     }
37     return done;
38 }
39
40 void StateMachineExampleGame::DrawCurrentState()
41 {
42     if (m_pCurrentState)
43     {
44         m_pCurrentState->Draw();
45     }
46 }
47
48 void StateMachineExampleGame::ChangeState(GameState* pNewState)
49 {
50     if (m_pCurrentState)
51     {
52         m_pCurrentState->Exit();
53     }
```

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54
55     delete m_pCurrentState;
56     m_pCurrentState = pNewState;
57     pNewState->Enter();
58 }
59
60 void StateMachineExampleGame::Cleanup()
61 {
62     if (m_pCurrentState)
63     {
64         m_pCurrentState->Exit();
65         delete m_pCurrentState;
66     }
67 }
68
69 void StateMachineExampleGame::LoadScene(SceneName scene)
70 {
71     switch (scene)
72     {
73     case SceneName::MainMenu:
74         m_pNewState = new MainMenuState(this);
75         break;
76     case SceneName::Gameplay:
77         m_pNewState = new GameplayState(this);
78         break;
79     case SceneName::Settings:
80         m_pNewState = new SettingState(this);
81         break;
82     case SceneName::Highscore:
83         m_pNewState = new HighScoreState(this);
84         break;
85     case SceneName::Win:
86         m_pNewState = new WinState(this);
87         break;
88     case SceneName::Lose:
89         m_pNewState = new LoseState(this);
90         break;
91     default:
92         break;
93     }
94 }
```